

WBK30[™] Memory Option

Compatibility: ✓ WaveBook ✓ ZonicBook

Features

- Allows full-speed sampling with resource-limited PCs
- Frees PC resources for other tasks
- Transparent operation

The WBK30[™] option for WaveBook[™] and ZonicBook[™] systems allows high-speed, deep-data collection, independent of PC resources such as memory allocation, disk, processor, or parallel port speeds.

There are several benefits of the WBK30. First, as a FIFO the WBK30 circumvents limited PC resources. If a PC's communication port or disk are too slow to sustain the 1 Msample/s rate of the WaveBook or ZonicBook, the WBK30 can act as a large FIFO, accepting data at full speed and then transferring it to the PC at its slower rate. This can continue until the WBK30 memory becomes full or the test is complete, whichever is sooner. The deeper the WBK30 option memory, and the faster your port, the longer the acquisition time.

In addition, the WBK30 can act as a storage buffer. In this mode, all data is recorded to the WBK30 initially with transfers to the PC only upon completion of the test. While waiting for the acquisition to finish, the PC is almost completely unburdened and free to perform other tasks.

The table above will assist in matching the WBK30 to expected recording time needs and current hard drive capacity. To use this table, first compute the WBK30 filling rate by subtracting the estimated port transfer speed from the aggregate sample rate. Find this value in the "Fill Speed" column. The recording times and total bytes acquired are found under the respective WBK30 option. For example, if an aggregate sample rate is 600 Ksample/s and the port data transfer rate is 400 Ksamples/s, then a WBK30/128 would enable a recording time of 5 minutes, 58 seconds and require 671.1 Mbytes (approximately 335 Msamples) of free disk space on a PC for storage.



The WBK30 memory accessory expands internal data FIFO

WBK30 Effective Storage Capacity*							
WBK30 Fill Speed	WBK30/16		WBK30/64		WBK30/128		
(Aggregate Rate – Port Speed) Ksample/s	Time	File Size (Mbytes)	Time	File Size (Mbytes)	Time	File Size (Mbytes)	
1000	8.4 sec	16.8	34 sec	67.1	1 min 7 sec	134.2	
900	9.3 sec	18.6	37 sec	74.6	1 min 15 sec	149.1	
800	10.5 sec	21.0	42 sec	83.9	1 min 23 sec	167.8	
700	12.0 sec	24.0	48 sec	95.9	1 min 36 sec	191.7	
600	14.0 sec	28.0	56 sec	111.8	1 min 52 sec	223.7	
500	16.8 sec	33.6	1 min 7 sec	134.2	2 min 14 sec	268.4	
400	21.0 sec	41.9	1 min 23 sec	167.8	2 min 48 sec	335.5	
300	28.0 sec	55.9	1 min 52 sec	223.7	3 min 44 sec	447.4	
200	41.9 sec	83.9	2 min 38 sec	335.5	5 min 58 sec	671.1	
100	83.9 sec	167.8	5 min 35 sec	671.1	11 min 11 sec	1342.2	

^{*} Assumes 2 byte sample length

Ordering Information

WBK30/16
WBK30/64
WBK30/128

Note: The WBK30 is supported in the 32-bit driver only.

For complete information on accessories and cables, visit www.iotech.com/acc

Related Products

WaveBook Series	p. 17
ZonicBook	p. 59

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